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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/053,737	01/24/2002	Shintaro Shimogori	032865-014	4236

7590 08/03/2004

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EXAMINER

COLEMAN, ERIC

ART UNIT	PAPER NUMBER
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2183

DATE MAILED: 08/03/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary	Application No.	Applicant(s)	
	10/053,737	SHIMOGORI ET AL.	
	Examiner	Art Unit	
	Eric Coleman	2183	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-29 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) 22-29 is/are allowed.
- 6) ☒ Claim(s) 1-8 and 12-18 is/are rejected.
- 7) ☒ Claim(s) 9-11 and 19-21 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1,8,14, are rejected under 35 U.S.C. 103(a) as being unpatentable over Asghar (patent No. 6,085,314) in view of McElroy (patent No. 6,055,373).

3. Asghar taught the invention substantially as claimed including a data processing ("DP") system comprising:

a) Special purpose data processing unit (DSP, 214) that includes a data path portion for specialized data processing that is executed according to one special-purpose instruction (e.g., see fig.1, 3 and col. 3, line 44-col. 4, line 39);

b) General purpose data processing unit (212)(e.g., see fig.1);

c) Instruction issuing unit for issuing instruction to at least one special-purpose data processing unit and general purpose data processing unit, based one a program that includes the at least one special purpose instruction and general purpose instructions (e.g., see fig.3 and col. 3, line 44-col. 4, line 39).

4. Asghar did not expressly detail (claim 1,8,14) the general purpose data processing unit of type 1 data processing apparatus included the communication means for exchanging data with the general purpose data processing unit in at least one other

type 1 data processing apparatus. McElroy taught a DP system with plural CPUs and DSPs that communicated via a bus (e.g., see 2 and col. 14, lines 14-43).

5. It would have been obvious to one of ordinary skill in the DP art to combine the teachings of Asghar and McElroy. One of ordinary skill would have been motivated to incorporate plural DSPs and CPUs at least to provide increased versatility that would be available using plurality DSPs instead of a single DSP and General purpose processor (e.g., see col. 1, line 60-col. 1, line 2).

6. Claims 2,12,13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Asghar (patent No. 6,085,314) in view of McElroy (patent No. 6,055,373) as applied to claim 1 above, and further in view of Monroe (patent No. 5,911,082).

7. Monroe taught at least one of at least one special purpose data processing unit was equipped with a function for exchanging (transmitting and receiving) data with a type 1 or type 2 data processing apparatus (e.g., see figs. 1,2,3,4,5,12,13). It would have been obvious to one of ordinary skill in the DP art to combine the teachings of Asghar and Monroe. One of ordinary skill would have been motivated to incorporate the Monroe teachings of plural different building block DSP processors with data router and communication between DSPs to allow increased performance as specific DSPs would be configured to perform specific level processes or portion of a processes (e.g., see col. 1, line 53-col. 3, line 32 of Monroe).

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8. Claims 3,15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Asghar (patent No. 6,085,314) in view of McElroy (patent No. 6,055,373) as applied to claim 1,14 above, and further in view of Intrater (5,630,153).

9. As per claim 3,15, Asghar taught the type 1 data processing apparatus are with a code memory area for storing the program and a data memory area for inputting and/or outputting data in accordance with at least one of the general-purpose instructions and/or outputting data in accordance with at least one of the general-purpose instructions (e.g., see figs.4, 9,10). Asghar did not expressly detail when one of an input address of and input of data and an output address for an output of data according to one of the general-purpose instructions is in a predetermined address range, the communications means in a type 1 data processing apparatus exchanges data by performing one of input and an output of data for the data memory area assigned to another type 1 data processing apparatus. Intrater however taught that the instructions for memory or I/O were stored and accessed in a predetermined range of addresses (e.g., see fig. 5). Consequently to perform data input or output the predetermined range of address would have been accessed.

10. It would have been obvious to one of ordinary skill in the DP art to combine the teachings of Asghar and Intrater. The addition of the Intrater teachings of means to access external memory and I/O would have enabled the combined system to communicate with external systems and store data and/or instructions externally.

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11. Claims 4,5,6,7,16-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Asghar (patent No. 6,085,314) and McElroy (patent No. 6,055,373) in view of Intrater as applied to claims 1,3,14,15 above, and further in view of Monroe (patent No. 5,911,082).

12. Monroe taught at least one of at least one special purpose data processing unit was equipped with a function for exchanging (transmitting and receiving) data with a type 1 or type 2 data processing apparatus (e.g., see figs. 1,2,3,4,5,12,13). It would have been obvious to one of ordinary skill in the DP art to combine the teachings of Asghar and Monroe. One of ordinary skill would have been motivated to incorporate the Monroe teachings of plural different building block DSP processors with data router and communication between DSPs to allow increased performance as specific DSPs would be configured to a perform specific level processes or portion of a processes (e.g., see col. 1, line 53-col. 3, line 32 of Monroe).

Allowable Subject Matter

13. Claims 9,10,11,19,20,21 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

14. Claims 22-29 allowed.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.


Baji (patent No. 5,740,404) disclosed a digital signal processor with on-chip select decoder and wait state generator (e.g., see abstract).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eric Coleman whose telephone number is (703) 305-9674. The examiner can normally be reached on Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eddie Chan can be reached on (703) 305-9712. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

EC



ERIC COLEMAN
PRIMARY EXAMINER